

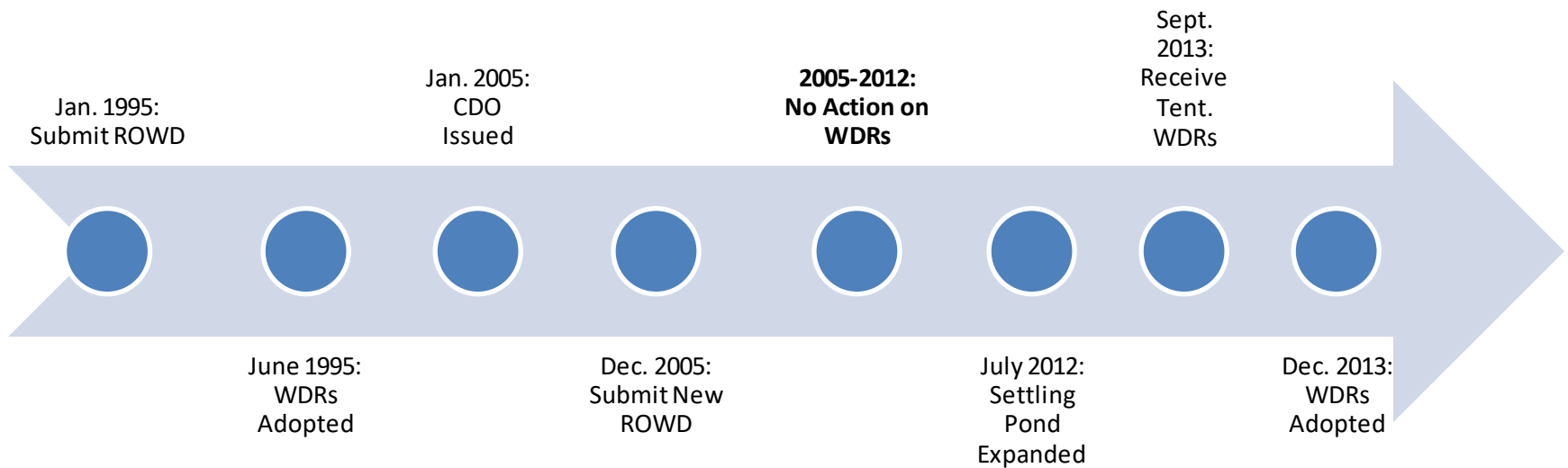
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**The Morning Star Company**  
**Administrative Civil Liability Complaint R5-2015-0549**  
Presentation to Central Valley RWQCB  
February 18, 2016

# Map of Facility



# Timeline



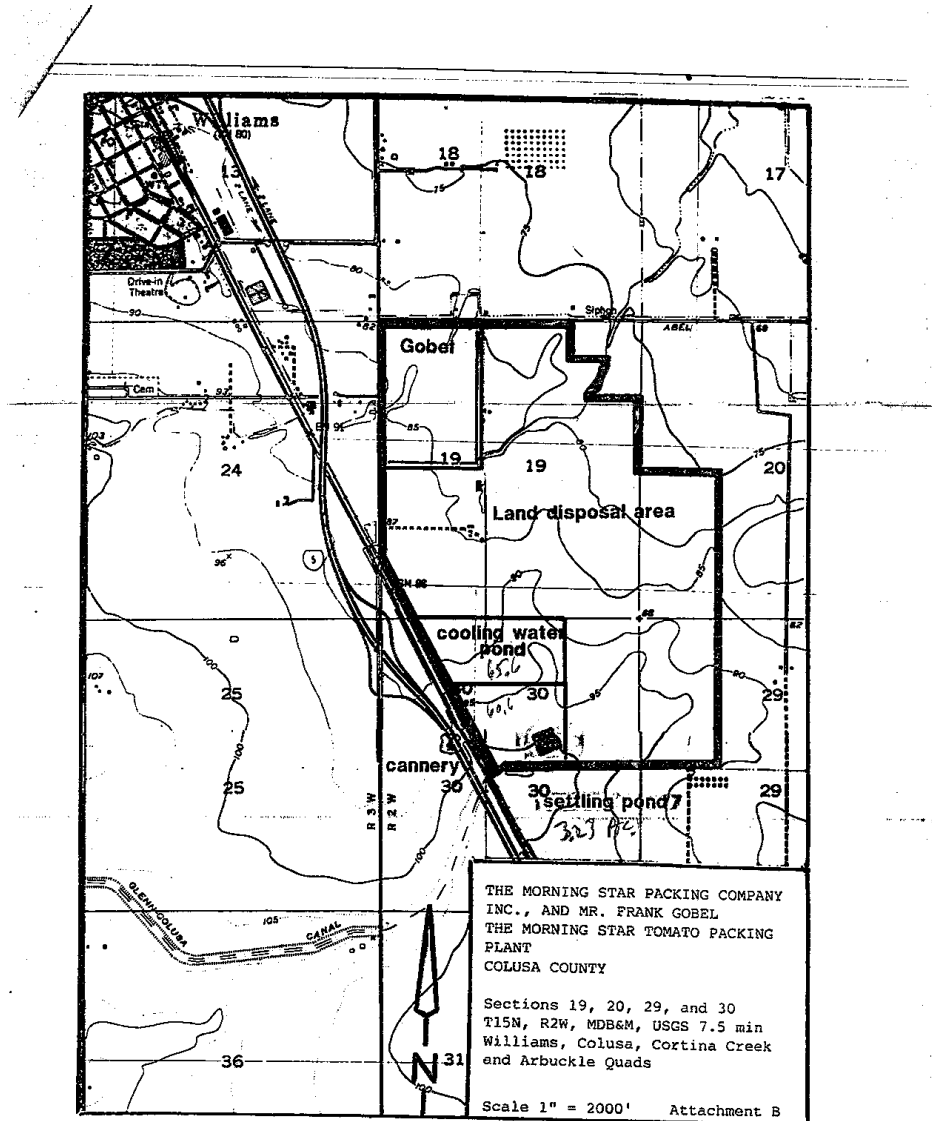
# Settling Pond Expansion Does Not Violate 1995 WDRs

- 1995 WDRs, Standard Provision A.4

“Before making a **material change** in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to:

  - a. An increase in area or depth to be used for solid waste **disposal** beyond that specified in WDRs.
  - b. A **significant** change in **disposal** method, location or volume, e.g., change from land disposal to land treatment.
  - c. The addition of a **major** industrial, municipal or domestic waste discharge facility.
  - d. The addition of a **major** industrial waste discharge to a discharge of essentially **domestic sewage** or the addition of a new process or product by an industrial facility resulting in a **change in the character of the waste.**”

# 1995 WDRs, Attachment B



# Settling Pond Expansion Does Not Violate 2013 WDRs

- 2013 WDRs, Prohibition A.3

“Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.”
- 2013 WDRs, Standard Provision A.4
  - No material change
  - During hearing on 2013 WDRs, staff suggested expanding Settling Pond as an option to address stormwater
  - No water quality degradation

# 1995 WDRs Cannot Be Basis For Enforcement

- 2013 WDRs, p. 1  
“WDRs Order 95-160 be rescinded and replaced with this Order.”
- 2013 WDRs, p. 28  
“WDRs Order 95-160 is rescinded...”

# 1995 WDRs Cannot Be Basis For Enforcement

- 2013 WDRs **do not say**:
  - Rescinded “except for enforcement purposes” or
  - “This action in no way prevents the Central Valley Board from taking enforcement action for past violations of the previous Order”

(See, e.g., Order No. R5-2009-0009, R5-2012-0034, R5-2014-0104)
- Prosecution seeks fines for 2 seasons that predate 2013 WDRs

# Cooling Pond Expansion Does Not Violate WDRs

- WDRs, Standard Provision A.4

“Before making a **material change** in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board.”
- WDRs, Prohibition A.3

“Discharge of waste at a location or in a manner different from that **described in the Findings** is prohibited”

# Cooling Pond Expansion Was Contemplated

- Morning Star comments on Tentative WDRs:  
*“The facility has plans to **expand the processing operations** by 65% in the future. The expansion is not anticipated to change wastewater characteristics or cause flow limits to be exceeded.”* (30 Oct. 2013)
- 2013 WDRs Finding 28:  
*“The Discharger plans to **increase production** by up to 65% in the future...”* (WDRs, p. 12.)

# Cooling Pond Expansion Was Contemplated

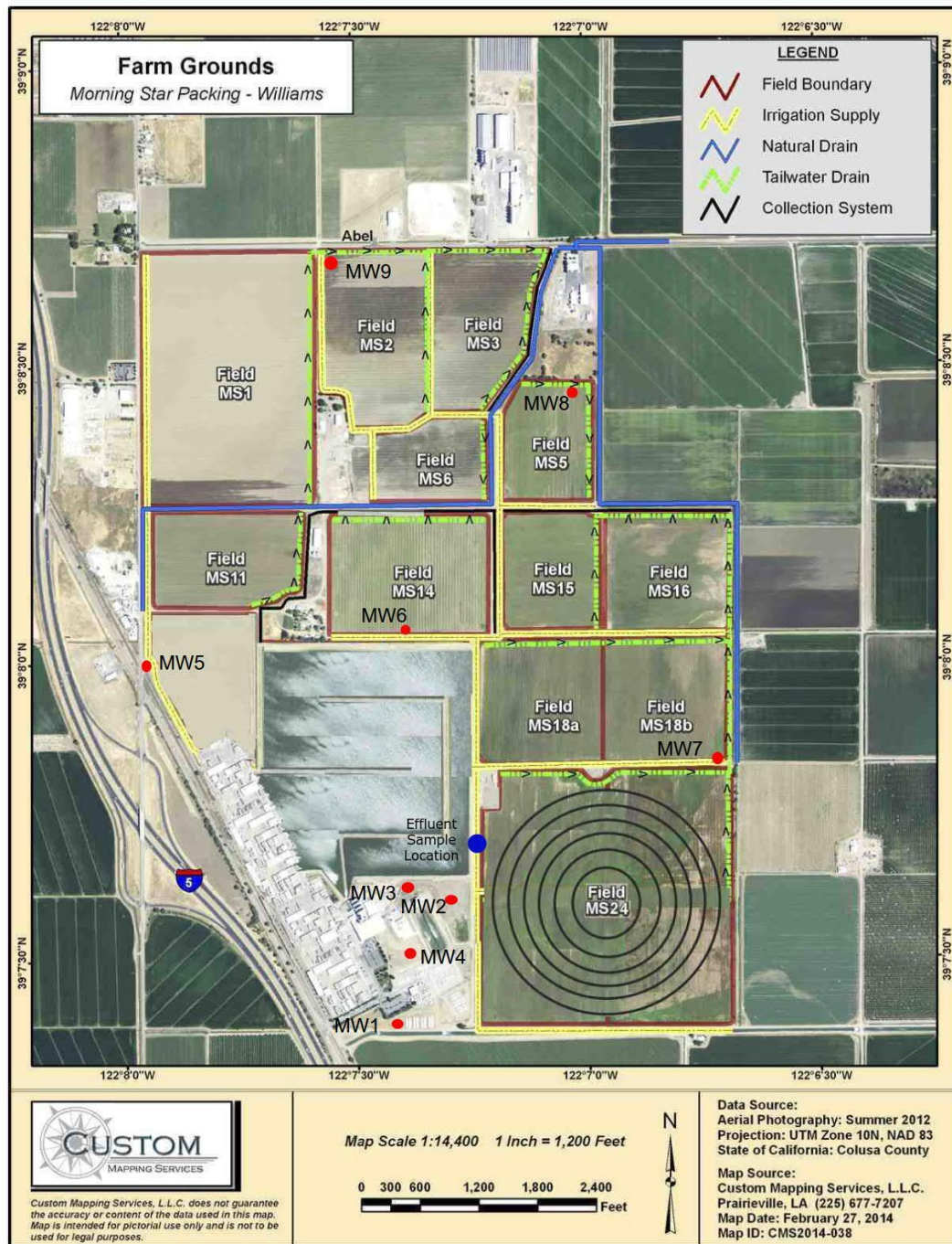
- Cooling Pond is part of processing operations
- Fully disclosed 65% expansion in processing operations
- Expanded pond not put into service until July 24, 2015
  - Prosecution assumes expansion complete for entire 2015 season

# No Basis for Penalty

- Settling Pond expansion
  - Not prohibited by 1995 WDRs
  - Predates 2013 WDRs
  - Reflects oversight in permit drafting
- Cooling Pond expansion
  - Clearly communicated to Regional Board and contemplated in 2013 WDRs

# Penalty Calculation Is Not Supported

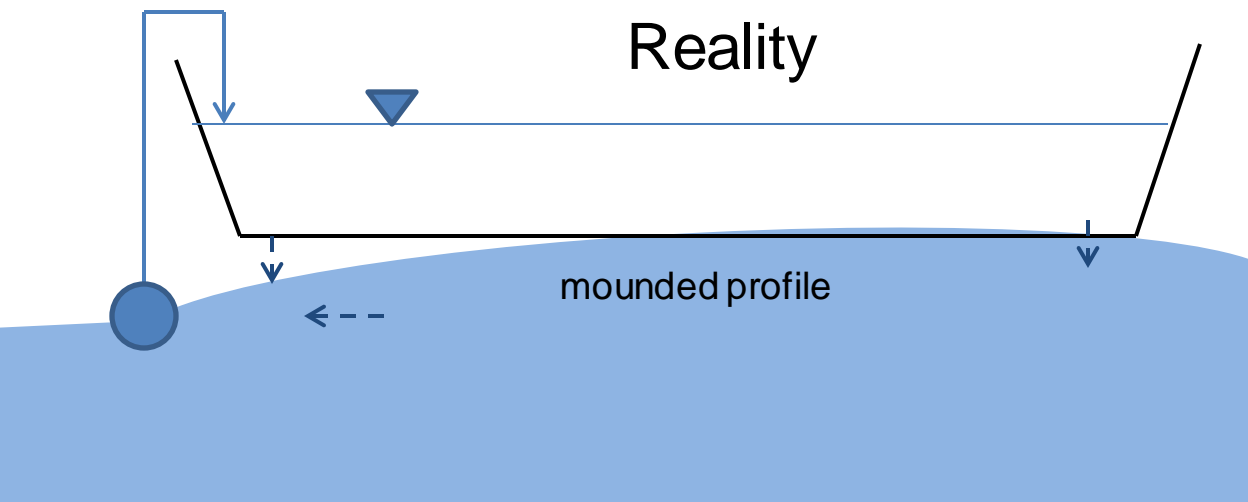
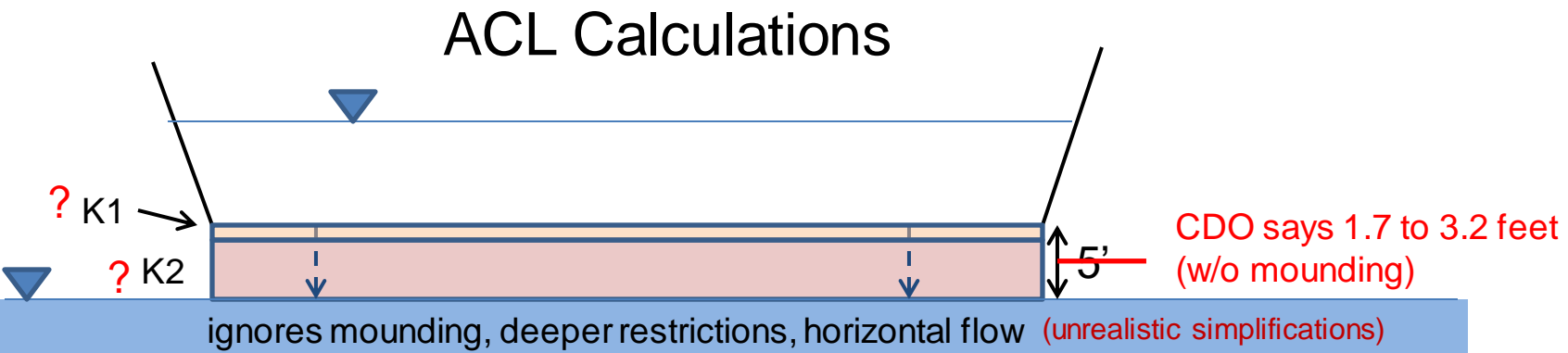
- Improperly includes 2 seasons before 2013 WDRs
- Improperly includes days before Cooling Pond placed in service
- Seepage calculation assumptions are arbitrary
- No water quality degradation
- No potential to harm beneficial uses



# Cooling Pond Expansion

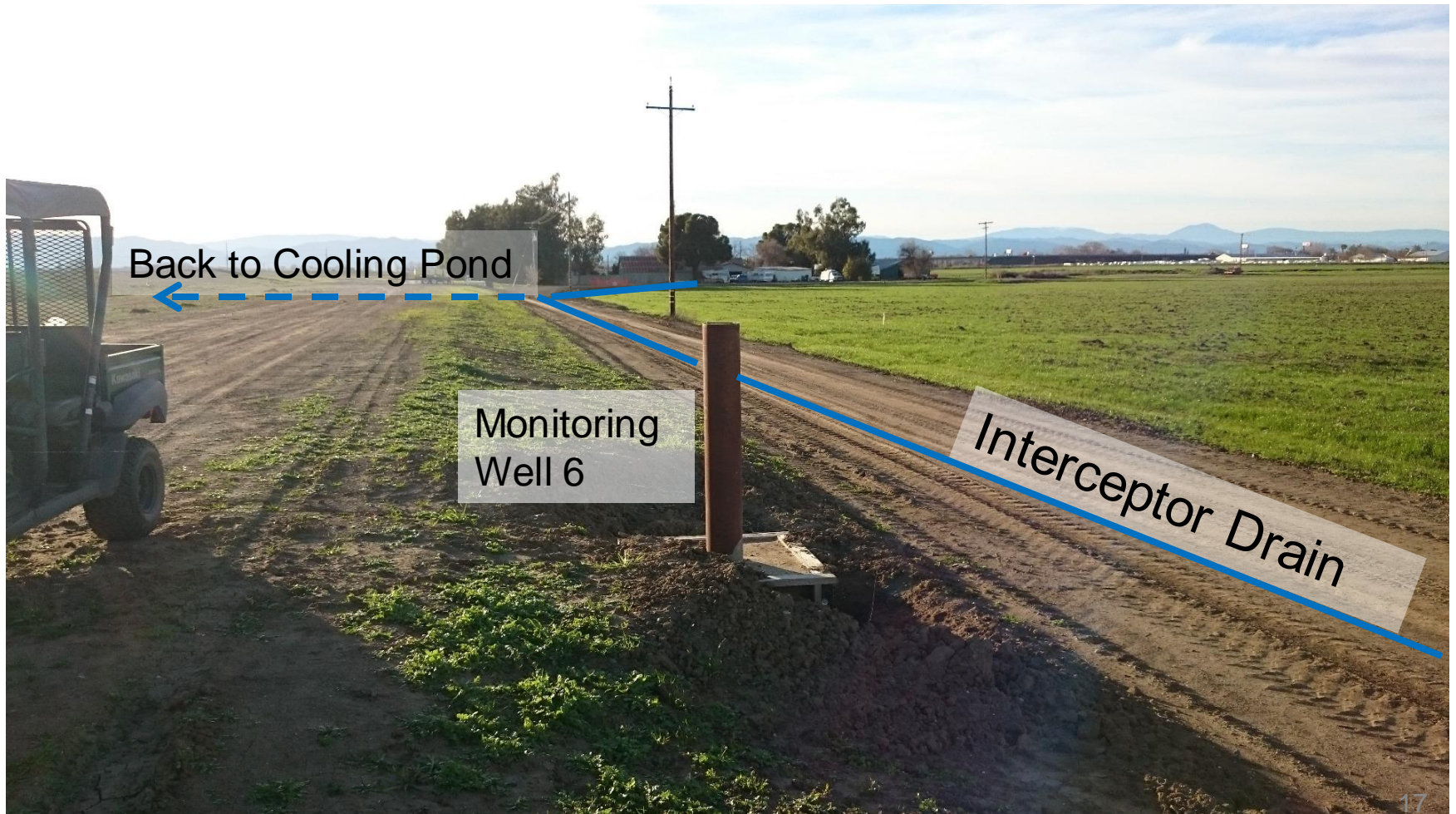


# ACL Cooling Pond Seepage Calculations Not Based On Actual Hydrogeological Data

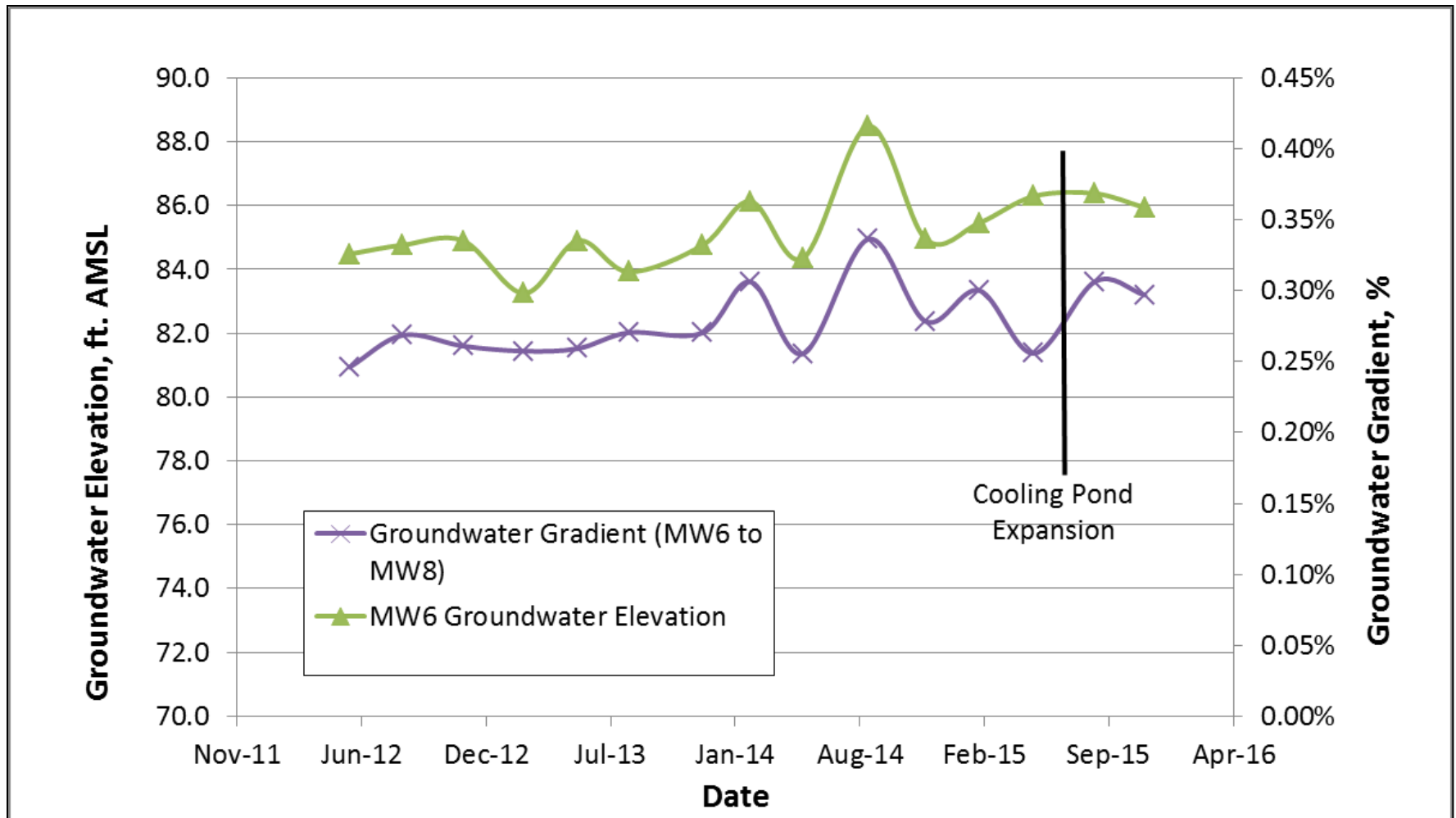


- Insufficient hydrogeo data to calculate seepage.
- Mounding likely reduces seepage.
- Seepage captured and returned by interceptor drain.

# Cooling Pond Seepage is Captured and Returned



# Evidence Indicates No Net Increase in Seepage after Expansion

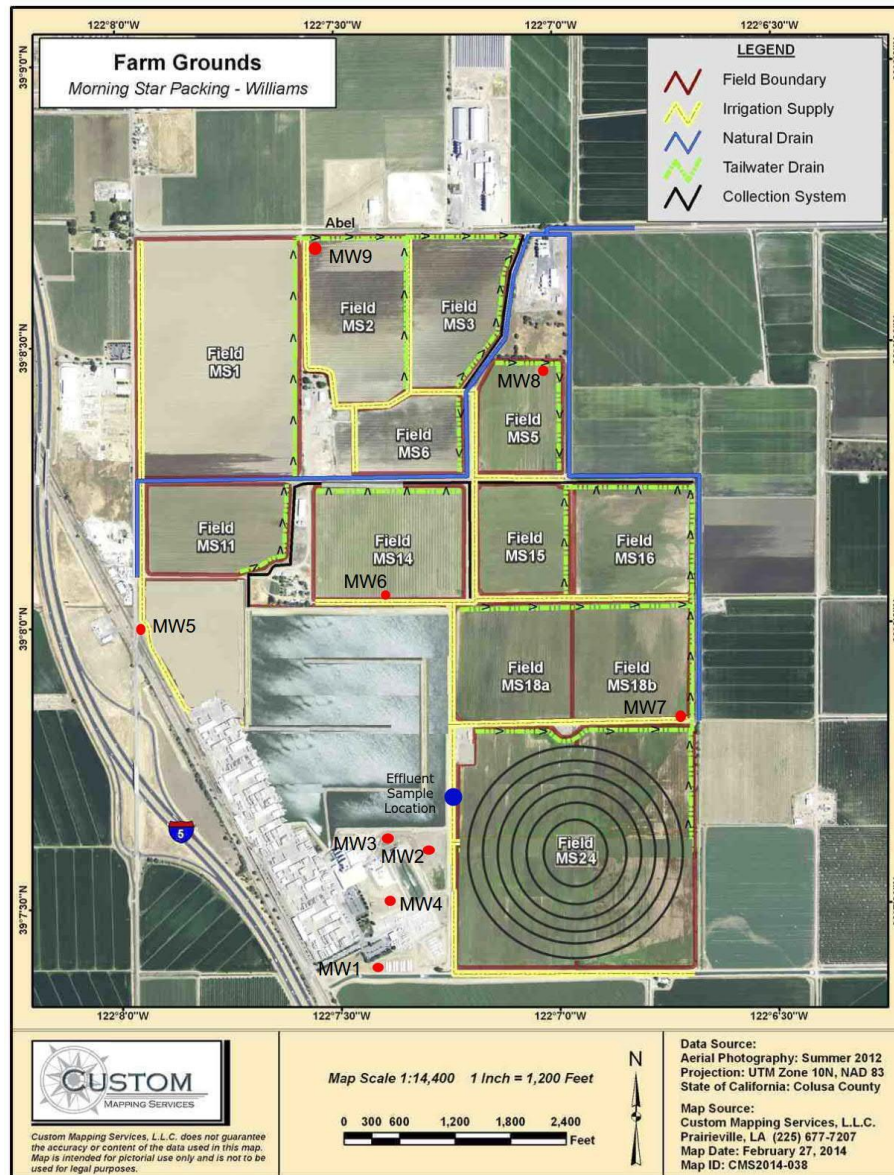


# 2013 WDRs Acknowledge Cooling Pond Improves Groundwater Quality

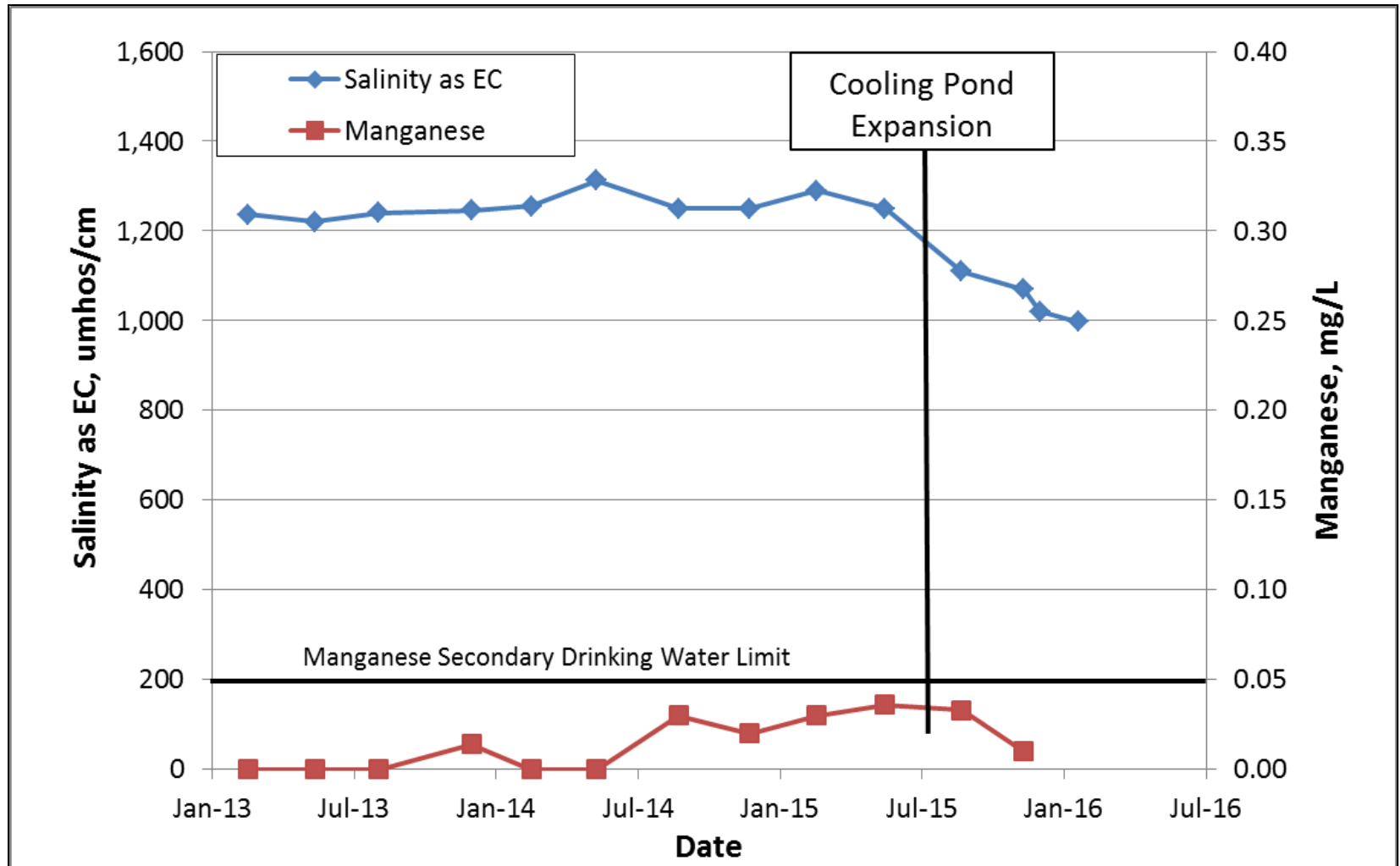
## Finding 40

40. Groundwater beneath the Facility and associated LAAs is relatively shallow... The unlined Cooling Pond also recharges the shallow groundwater immediately upgradient of the LAAs with relatively low salinity water year-round.

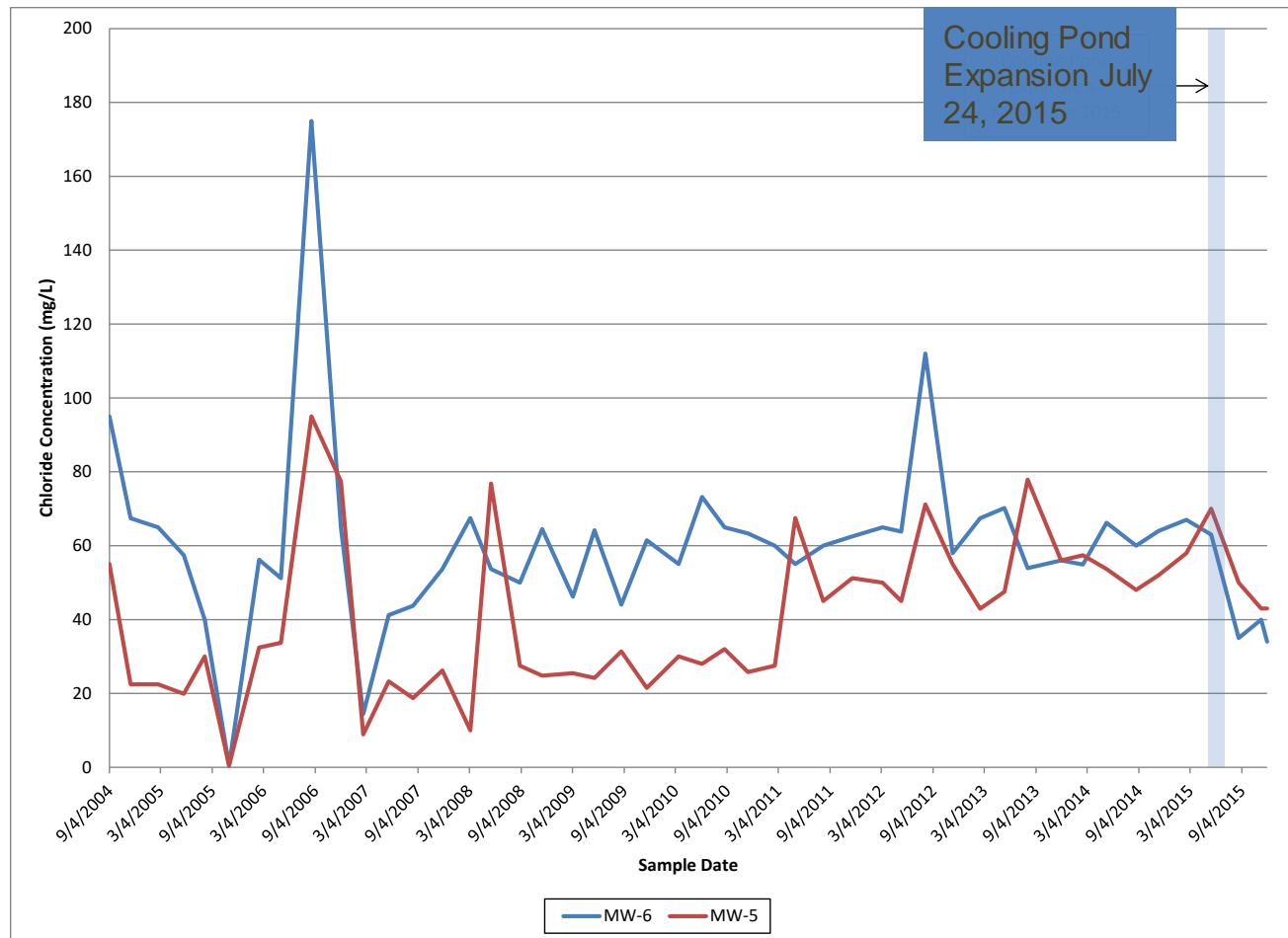
# Facility Monitoring Wells



# Cooling Pond Expansion Improves Groundwater Quality - Salinity and Manganese at Well 6



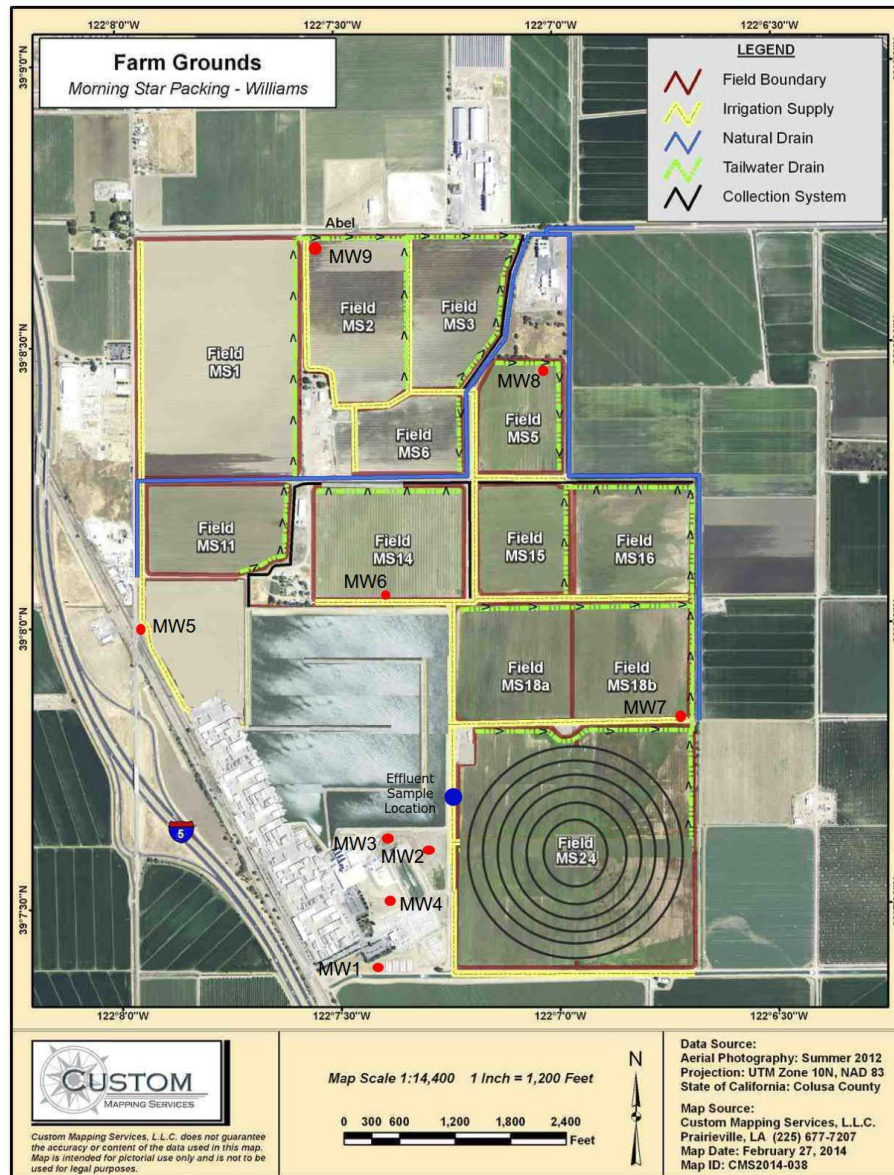
# Cooling Pond Expansion Does Not Adversely Impact Groundwater-Chloride



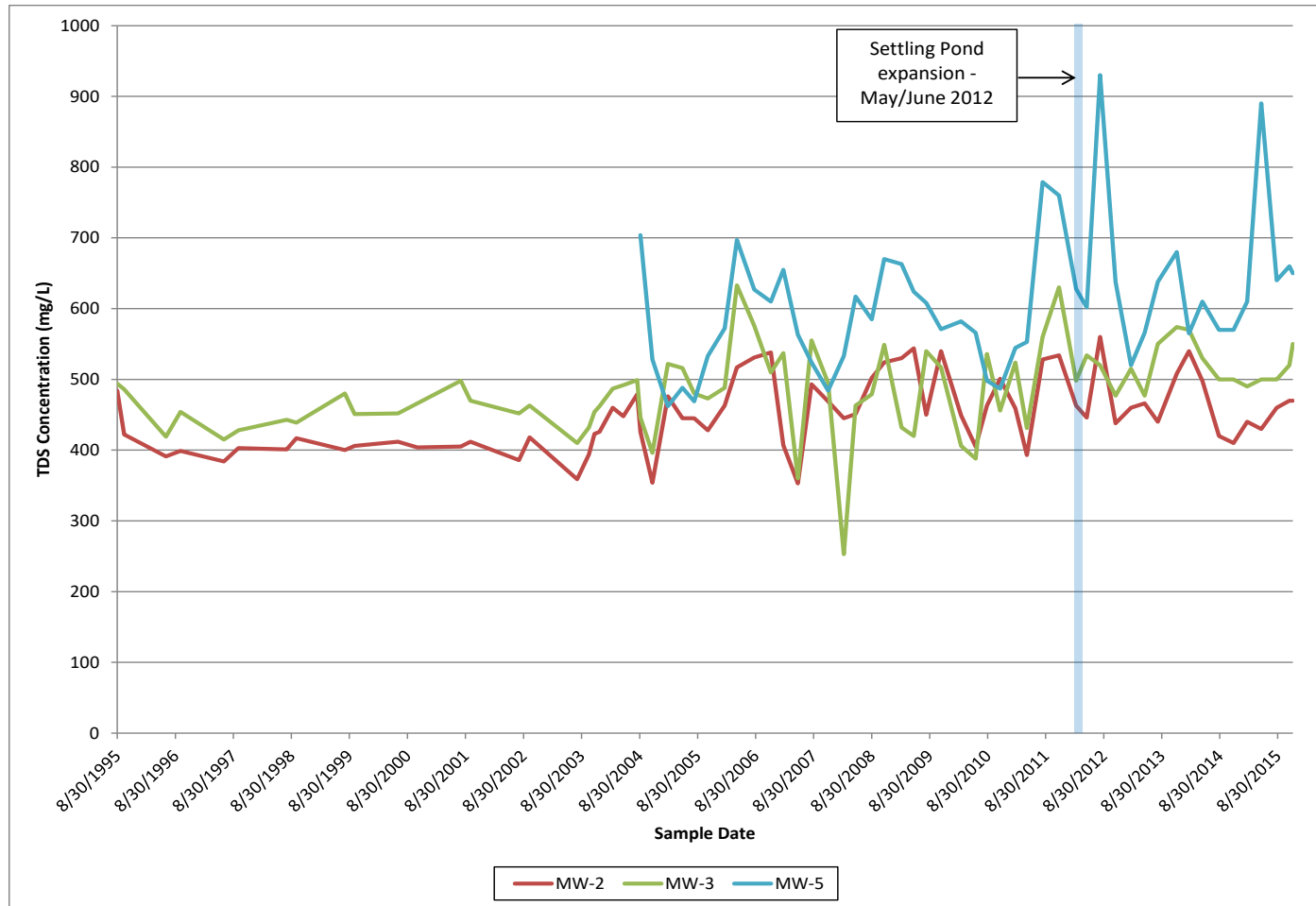
# Settling Pond



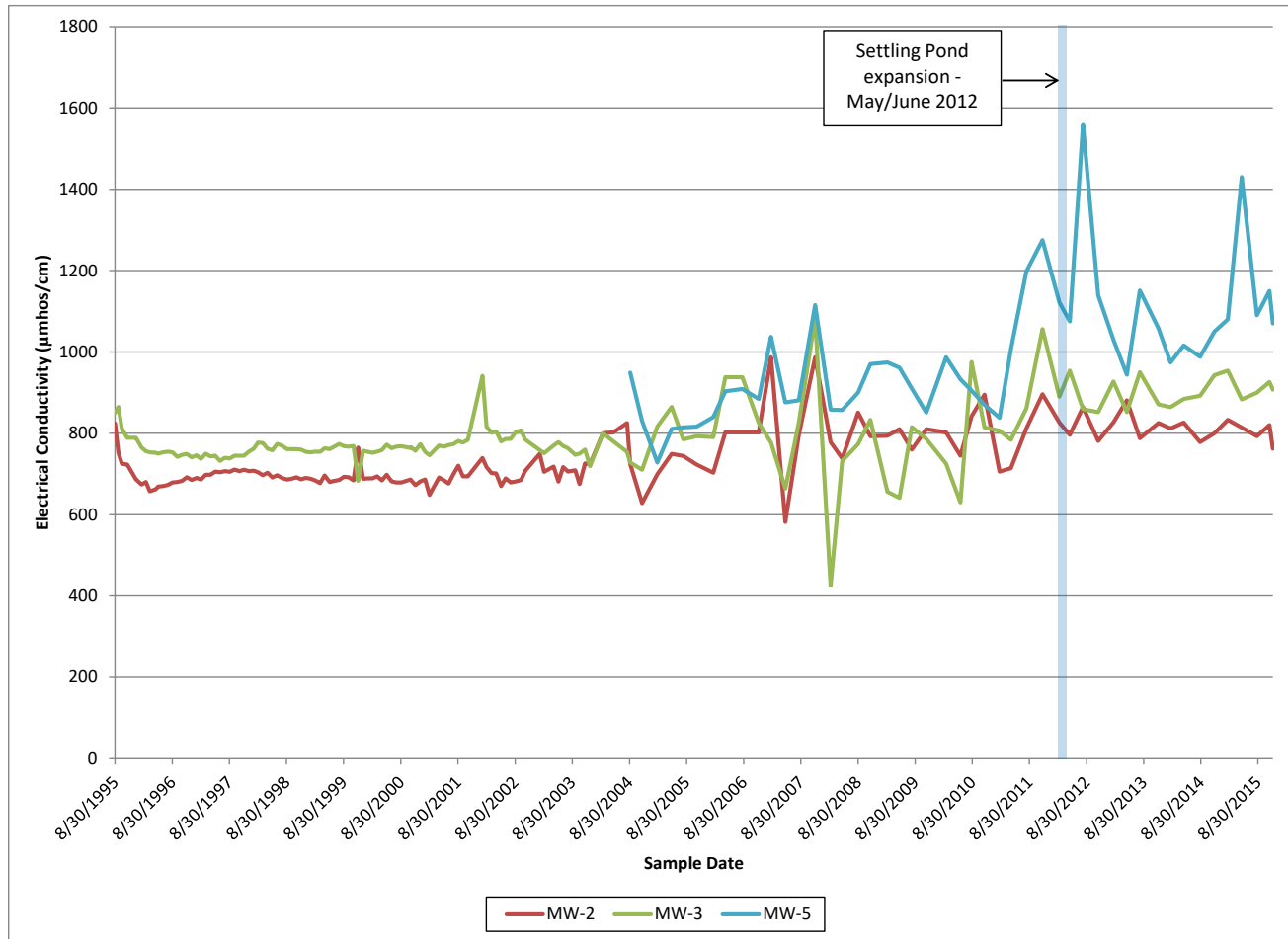
# Facility Monitoring Wells



# Settling Pond Expansion Does Not Adversely Impact Groundwater-TDS



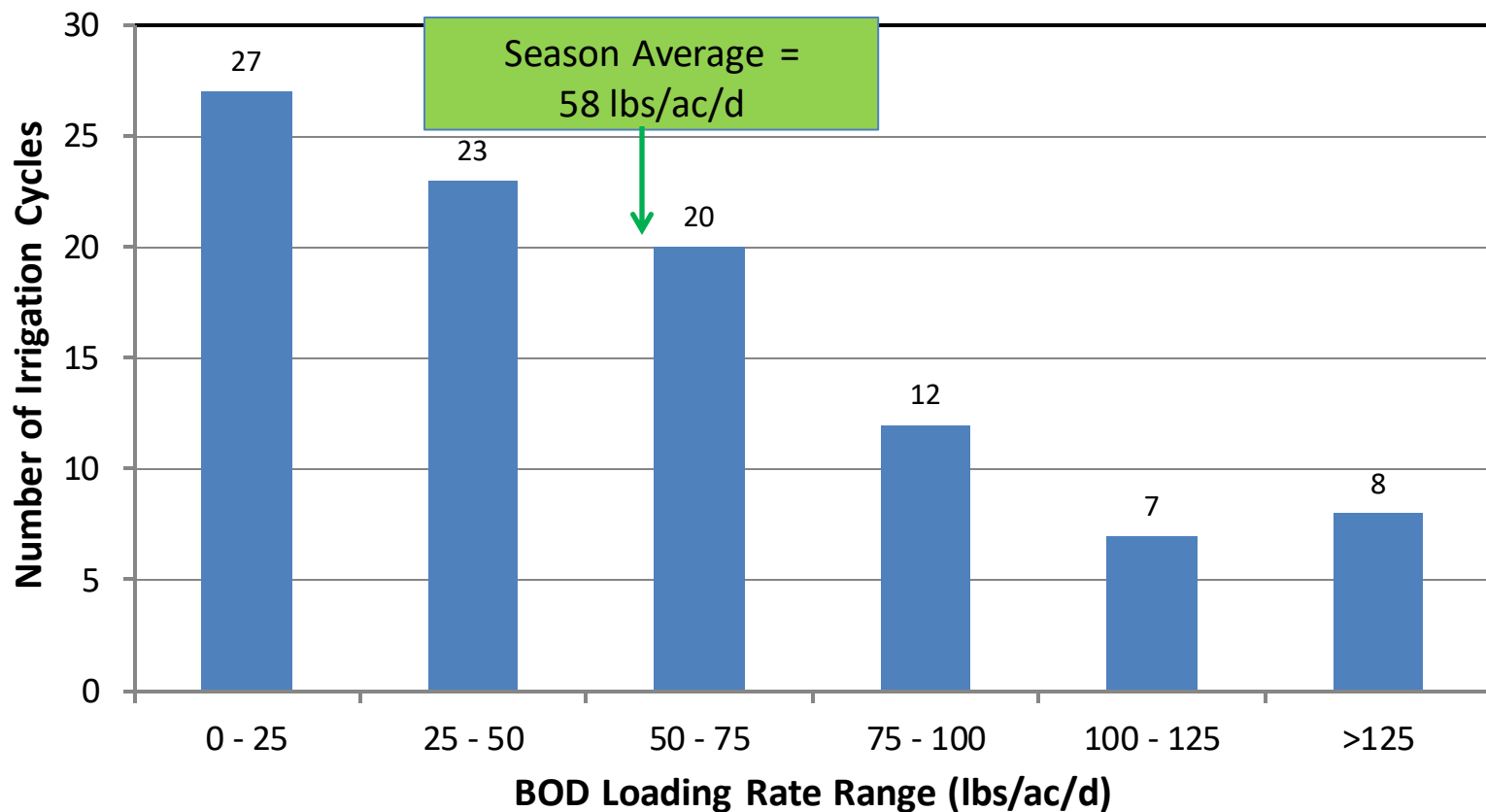
# Settling Pond Expansion Does Not Adversely Impact Groundwater-EC



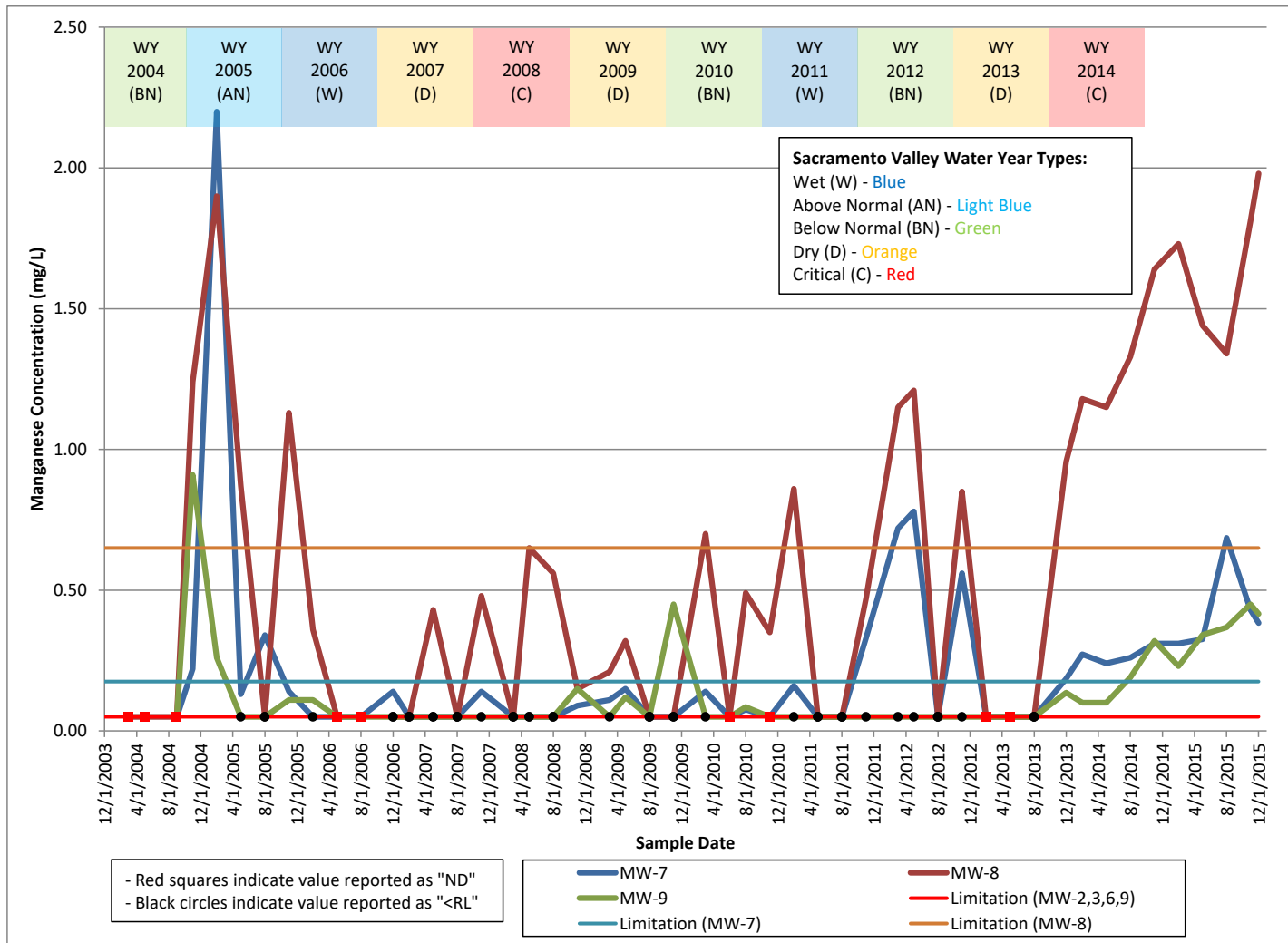
# No Evidence Of Manganese Pollution from LAAs

- Background wells
  - Highly variable manganese concentrations both in space and time
- Downgradient wells (MW- 7, 8 & 9)
  - Increasing concentrations since 2013
  - BOD overapplication occurred in 2015
    - Only for 15% of field applications
    - Site-wide average within requirements
  - Increasing concentrations can be related to:
    - Drought-Show Drought related impacts
    - Rice Farming- Show Rice Field map
- Recent results consistent with previous reports

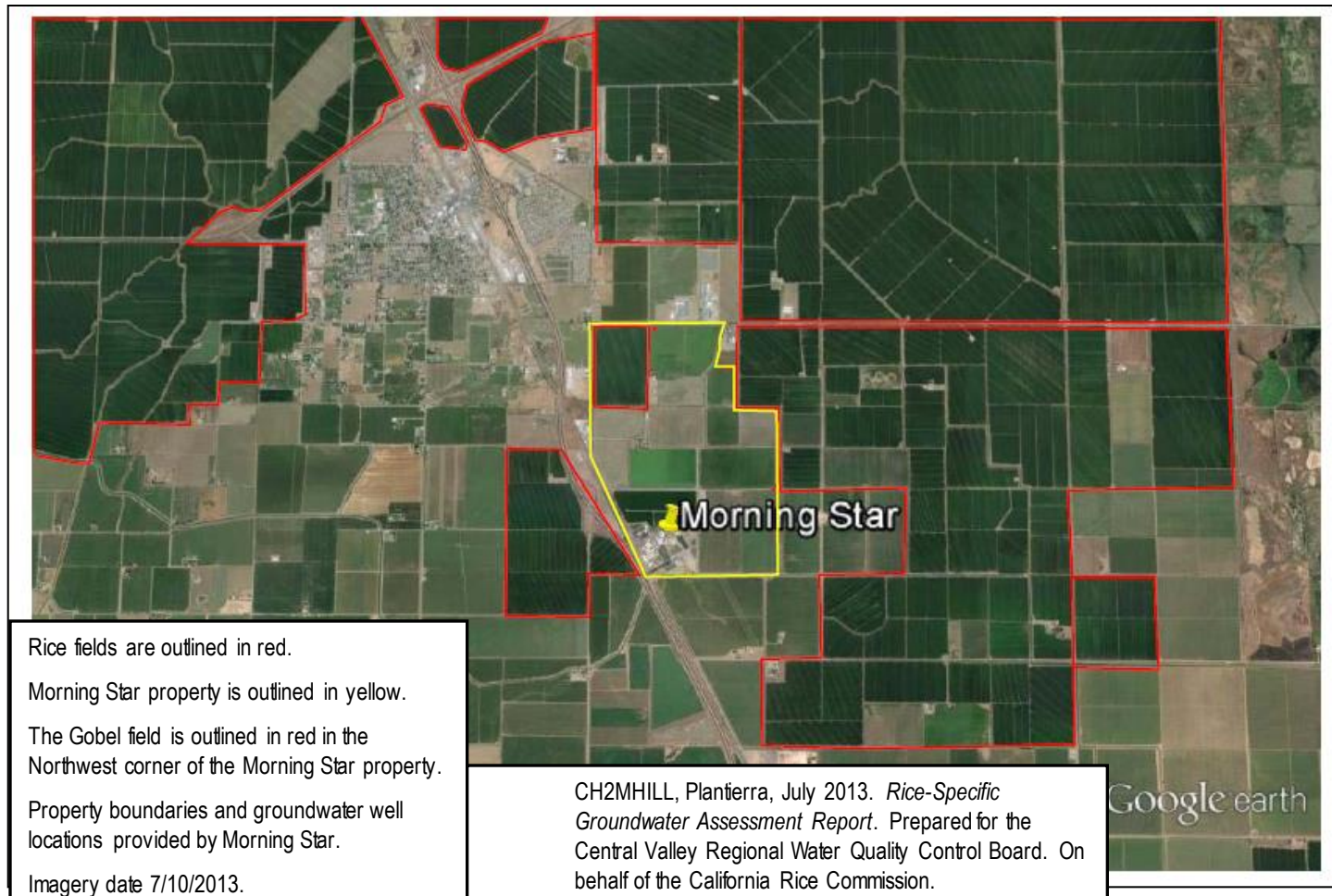
## 2015 Irrigation Cycle BOD Loadings Frequency



# Drought Effects



# Rice Farming



# Map of Facility



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# Settling Pond

- Expansion allows Morning Star to clean out pond at end of season, rather than cleaning out during processing season

# Cooling Pond

- Part of processing facility
- Expanded Cooling Pond most environmentally sound cooling option considering:
  - Power consumption
  - No or little chemical use vs. water towers
  - Water quality

# Closing

# No Basis For Penalty

- No violation of 1995 WDRs
- No violation of 2013 WDRs
- Penalty calculation is flawed
  - Assumed number of days is incorrect
  - Seepage calculation uses unsubstantiated hydrogeologic data, ignores recapture
- No degradation of receiving waters
- Potential to harm = 0

# Economic Benefit Stipulation

- Prosecution Team and Morning Star Stipulate:
  - \$205,577
  - Approx. 80% less than Prosecution Team's original estimate

# Penalty Calculation is Inconsistent with other Enforcement Actions

Order No. R5-2010-0501	Order No. R5-2015-0039	Order No. R5-2011-0538 Revision No. 1	Order No. R5-2010-0504	Order No. R5-2013-0095
Rogers Trucking	Athwal, Sarbjit & Satwant	Lake Berryessa Resort Impr. Dist.	City of Isleton	Henry Tosta Dairy
<i>Ammonia spill that killed fish</i>	<i>No ROWD for 900 acres ag</i>	<i>Raw sewage spills into lake</i>	<i>Raw sewage spill to surface water</i>	<i>Manure discharge to groundwater &amp; violation of cleanup order</i>
\$30,000	\$56,628	\$375,000	\$390,000 (with \$375,000 satisfied w/projects	\$685,000

# Cooling Pond – BOD Loading Rates

- BOD loading rates for unaerated ponds (i.e. reflects natural aeration rates):

Reference	Range (lbs/ac/d)	Adjusted for Cooling Pond Temp. (lbs/ac/d)	Adjusted Max Concentration (mg/L)
EPA Pond Design Manual	40 - 80	28 - 57	69 - 138
Tchobanoglous and Burton	60 - 120	43 - 85	104 - 209

- Adequate natural aeration and positive dissolved oxygen protect against odors and low soil redox

# Cooling Pond – Organics Were Anticipated

- The only rational reason for existing odor monitoring requirements for the Cooling Pond is anticipation of some amount of organics.
- Staff contends that odor monitoring is typically required for all ponds, and organics were not anticipated.

## Nearby Pond Permits without Odor Monitoring

Industrial	Municipal
Granite, Lake County	Stockton
Bear River Aggregates	Orland
Ford Construction Company	Thornton
Morris Ravine Quarry, Butte	
Teichert Esparto	
Crystal Creek Aggregates Shasta	